10/541886

SEQUENCE LISTING

<110> Bayer AG, BHC

5   <120> Method for inhibiting the replication of herpesviruses

<130> Le A 36 269

<160> 1

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<170> PatentIn version 3.1

<210> 1
<211> 1370
15   <212> PRT
<213> Human cytomegalovirus

<400> 1
Met Glu Asn Trp Ser Ala Leu Glu Leu Leu Pro Lys Val Gly Ile Pro
20   1   5   10   15

Thr Asp Phe Leu Thr His Val Lys Thr Ser Ala Gly Glu Glu Met Phe
            20   25   30

Glu Ala Leu Arg Ile Tyr Tyr Gly Asp Asp Pro Glu Arg Tyr Asn Ile
            35   40   45

25   His Phe Glu Ala Ile Phe Gly Thr Phe Cys Asn Arg Leu Glu Trp Val
            50   55   60

Tyr Phe Leu Thr Ser Gly Leu Ala Ala Ala Ala His Ala Ile Lys Phe
65   70   75   80

His Asp Leu Asn Lys Leu Thr Thr Gly Lys Met Leu Phe His Val Gln
30   85   90   95

Val Pro Arg Val Ala Ser Gly Ala Gly Leu Pro Thr Ser Arg Gln Thr
            100   105   110

Thr Ile Met Val Thr Lys Tyr Ser Glu Lys Ser Pro Ile Thr Ile Pro
            115   120   125

35   Phe Glu Leu Ser Ala Ala Cys Leu Thr Tyr Leu Arg Glu Thr Phe Glu
            130   135   140

Gly Thr Ile Leu Asp Lys Ile Leu Asn Val Glu Ala Met His Thr Val
145   150   155   160

Leu Arg Ala Leu Lys Asn Thr Ala Asp Ala Met Glu Arg Gly Leu Ile
40   165   170   175

His Ser Phe Leu Gln Thr Leu Leu Arg Lys Ala Pro Pro Tyr Phe Val
            180   185   190

Val Gln Thr Leu Val Glu Asn Ala Thr Leu Ala Arg Gln Ala Leu Asn
            195   200   205

45   Arg Ile Gln Arg Ser Asn Ile Leu Gln Ser Phe Lys Ala Lys Met Leu
            210   215   220

Ala Thr Leu Phe Leu Leu Asn Arg Thr Arg Asp Arg Asp Tyr Val Leu

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          225                    230                    235                    240
          Lys Phe Leu Thr Arg Leu Ala Glu Ala Ala Thr Asp Ser Ile Leu Asp
                              245                    250                    255
          Asn Pro Thr Thr Tyr Thr Thr Ser Ser Gly Ala Lys Ile Ser Gly Val
                              260                    265                    270
 5        Met Val Ser Thr Ala Asn Val Met Gln Ile Ile Met Ser Leu Leu Ser
                              275                    280                    285
          Ser His Ile Thr Lys Glu Thr Val Ser Ala Pro Ala Thr Tyr Gly Asn
                              290                    295                    300
 10       Phe Val Leu Ser Pro Glu Asn Ala Val Thr Ala Ile Ser Tyr His Ser
          305                    310                    315                    320
          Ile Leu Ala Asp Phe Asn Ser Tyr Lys Ala His Leu Thr Ser Gly Gln
                              325                    330                    335
          Pro His Leu Pro Asn Asp Ser Leu Ser Gln Ala Gly Ala His Ser Leu
 15                           340                    345                    350
          Thr Pro Leu Ser Met Asp Val Ile Arg Leu Gly Glu Lys Thr Val Ile
                              355                    360                    365
          Met Glu Asn Leu Arg Arg Val Tyr Lys Asn Thr Asp Thr Lys Asp Pro
                              370                    375                    380
 20       Leu Glu Arg Asn Val Asp Leu Thr Phe Phe Phe Pro Val Gly Leu Tyr
          385                    390                    395                    400
          Leu Pro Glu Asp Arg Gly Tyr Thr Thr Val Glu Ser Lys Val Lys Leu
                              405                    410                    415
          Asn Asp Thr Val Arg Asn Ala Leu Pro Thr Thr Ala Tyr Leu Leu Asn
 25                           420                    425                    430
          Arg Asp Arg Ala Val Gln Lys Ile Asp Phe Val Asp Ala Leu Lys Thr
                              435                    440                    445
          Leu Cys His Pro Val Leu His Glu Pro Ala Pro Cys Leu Gln Thr Phe
                              450                    455                    460
 30       Thr Glu Arg Gly Pro Pro Ser Glu Pro Ala Met Gln Arg Leu Leu Glu
          465                    470                    475                    480
          Cys Arg Phe Gln Gln Glu Pro Met Gly Gly Ala Ala Arg Arg Ile Pro
                              485                    490                    495
          His Phe Tyr Arg Val Arg Arg Glu Val Pro Arg Thr Val Asn Glu Met
 35                           500                    505                    510
          Lys Gln Asp Phe Val Val Thr Asp Phe Tyr Lys Val Gly Asn Ile Thr
                              515                    520                    525
          Leu Tyr Thr Glu Leu His Pro Phe Phe Asp Phe Thr His Cys Gln Glu
 40                           530                    535                    540
          Asn Ser Glu Thr Val Ala Leu Cys Thr Pro Arg Ile Val Ile Gly Asn
          545                    550                    555                    560
          Leu Pro Asp Gly Leu Ala Pro Gly Pro Phe His Glu Leu Arg Thr Trp
                              565                    570                    575
          Glu Ile Met Glu His Met Arg Leu Arg Pro Pro Pro Asp Tyr Glu Glu
 45                           580                    585                    590
          Thr Leu Arg Leu Phe Lys Thr Thr Val Thr Ser Pro Asn Tyr Pro Glu
                              595                    600                    605
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      Leu Cys Tyr Leu Val Asp Val Leu Val His Gly Asn Val Asp Ala Phe
          610                 615                 620

      Leu Leu Ile Arg Thr Phe Val Ala Arg Cys Ile Val Asn Met Phe His
      625                 630                 635                 640

 5    Thr Arg Gln Leu Leu Val Phe Ala His Ser Tyr Ala Leu Val Thr Leu
                      645                 650                 655

      Ile Ala Glu His Leu Ala Asp Gly Ala Leu Pro Pro Gln Leu Leu Phe
                      660                 665                 670

10    His Tyr Arg Asn Leu Val Ala Val Leu Arg Leu Val Thr Arg Ile Ser
              675                 680                 685

      Ala Leu Pro Gly Leu Asn Asn Gly Gln Leu Ala Glu Glu Pro Leu Ser
          690                 695                 700

      Ala Tyr Val Asn Ala Leu His Asp His Arg Leu Trp Pro Pro Phe Val
      705                 710                 715                 720

15    Thr His Leu Pro Arg Asn Met Glu Gly Val Gln Val Val Ala Asp Arg
                      725                 730                 735

      Gln Pro Leu Asn Pro Ala Asn Ile Glu Ala Arg His His Gly Val Ser
                      740                 745                 750

      Asp Val Pro Arg Leu Gly Ala Met Asp Ala Asp Glu Pro Leu Phe Val
20        755                 760                 765

      Asp Asp Tyr Arg Ala Thr Asp Asp Glu Trp Thr Leu Gln Lys Val Phe
          770                 775                 780

      Tyr Leu Cys Leu Met Pro Ala Met Thr Asn Asn Arg Ala Cys Gly Leu
      785                 790                 795                 800

25    Gly Leu Asn Leu Lys Thr Leu Leu Val Asp Leu Phe Tyr Arg Pro Ala
                      805                 810                 815

      Phe Leu Leu Met Pro Ala Ala Thr Ala Val Ser Thr Ser Gly Thr Thr
                      820                 825                 830

      Ser Lys Glu Ser Thr Ser Gly Val Thr Pro Glu Asp Ser Ile Ala Ala
30            835                 840                 845

      Gln Arg Gln Ala Val Gly Glu Met Leu Thr Glu Leu Val Glu Asp Val
          850                 855                 860

      Ala Thr Asp Ala His Thr Pro Leu Leu Gln Ala Cys Arg Glu Leu Phe
      865                 870                 875                 880

35    Leu Ala Val Gln Phe Val Gly Glu His Val Lys Val Leu Glu Val Arg
                      885                 890                 895

      Ala Pro Leu Asp His Ala Gln Arg Gln Gly Leu Pro Asp Phe Ile Ser
              900                 905                 910

40    Arg Gln His Val Leu Tyr Asn Gly Cys Cys Val Val Thr Ala Pro Lys
              915                 920                 925

      Thr Leu Ile Glu Tyr Ser Leu Pro Val Pro Phe His Arg Phe Tyr Ser
          930                 935                 940

      Asn Pro Thr Ile Cys Ala Ala Leu Ser Asp Asp Ile Lys Arg Tyr Val
      945                 950                 955                 960

45    Thr Glu Phe Pro His Tyr His Arg His Asp Gly Gly Phe Pro Leu Pro
                      965                 970                 975

      Thr Ala Phe Ala His Glu Tyr His Asn Trp Leu Arg Ser Pro Phe Ser
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                    980                985                990
         Arg Tyr Ser Ala Thr Cys Pro Asn  Val Leu His Ser Val  Met Thr Leu
                    995                1000               1005
         Ala Ala  Met Leu Tyr Lys Ile  Ser Pro Val Ser Leu  Val Leu Gln
 5          1010               1015               1020
         Thr Lys  Ala His Ile His Pro  Gly Phe Ala Leu Thr  Ala Val Arg
            1025               1030               1035
         Thr Asp  Thr Phe Glu Val Asp  Met Leu Leu Tyr Ser  Gly Lys Ser
            1040               1045                1050
10       Cys Thr  Ser Val Ile Ile Asn  Asn Pro Ile Val Thr  Lys Glu Glu
            1055               1060               1065
         Arg Asp  Ile Ser Thr Thr Tyr  His Val Thr Gln Asn  Ile Asn Thr
            1070               1075               1080
         Val Asp  Met Gly Leu Gly Tyr  Thr Ser Asn Thr Cys  Val Ala Tyr
15          1085               1090                1095
         Val Asn  Arg Val Arg Thr Asp  Met Gly Val Arg Val  Gln Asp Leu
            1100               1105               1110
         Phe Arg  Val Phe Pro Met Asn  Val Tyr Arg His Asp  Glu Val Asp
            1115               1120               1125
20       Arg Trp  Ile Arg His Ala Ala  Gly Val Glu Arg Pro  Gln Leu Leu
            1130               1135               1140
         Asp Thr  Glu Thr Ile Ser Met  Leu Thr Phe Gly Ser  Met Ser Glu
            1145               1150               1155
         Arg Asn  Ala Ala Ala Thr Val  His Gly Gln Lys Ala  Ala Cys Glu
25          1160               1165               1170
         Leu Ile  Leu Thr Pro Val Thr  Met Asp Val Asn Tyr  Phe Lys Ile
            1175               1180               1185
         Pro Asn  Asn Pro Arg Gly Arg  Ala Ser Cys Met Leu  Ala Val Asp
            1190               1195               1200
30       Pro Tyr  Asp Thr Glu Ala Ala  Thr Lys Ala Ile Tyr  Asp His Arg
            1205               1210               1215
         Glu Ala  Asp Ala Gln Thr Phe  Ala Ala Thr His Asn  Pro Trp Ala
            1220               1225               1230
         Ser Gln  Ala Gly Cys Leu Ser  Asp Val Leu Tyr Asn  Thr Arg His
35          1235               1240               1245
         Arg Glu  Arg Leu Gly Tyr Asn  Ser Lys Phe Tyr Ser  Pro Cys Ala
            1250               1255               1260
         Gln Tyr  Phe Asn Thr Glu Glu  Ile Ile Ala Ala Asn  Lys Thr Leu
            1265               1270               1275
40       Phe Lys  Thr Ile Asp Glu Tyr  Leu Leu Arg Ala Lys  Asp Cys Ile
            1280               1285               1290
         Arg Gly  Asp Thr Asp Thr Gln  Tyr Val Cys Val Glu  Gly Thr Glu
            1295               1300               1305
         Gln Leu  Ile Glu Asn Pro Cys  Arg Leu Thr Gln Glu  Ala Leu Pro
45          1310               1315               1320
         Ile Leu  Ser Thr Thr Thr Leu  Ala Leu Met Glu Thr  Lys Leu Lys
            1325               1330               1335
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Gly Gly  Ala Gly Ala Phe Ala  Thr Ser Glu Thr His  Phe Gly Asn
    1340             1345          1350
Tyr Val  Val Gly Glu Ile Ile  Pro Leu Gln Gln Ser  Met Leu Phe
    1355             1360          1365
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5   Asn Ser
        1370